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**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA**

STATE OF CALIFORNIA BY AND THROUGH
ATTORNEY GENERAL XAVIER BECERRA
AND CALIFORNIA STATE WATER
RESOURCES CONTROL BOARD, STATE OF
NEW YORK, STATE OF CONNECTICUT,
STATE OF ILLINOIS, STATE OF MAINE, STATE
OF MARYLAND, STATE OF MICHIGAN,
STATE OF NEW JERSEY, STATE OF NEW
MEXICO, STATE OF NORTH CAROLINA EX
REL. ATTORNEY GENERAL JOSHUA H. STEIN,
STATE OF OREGON, STATE OF RHODE
ISLAND, STATE OF VERMONT, STATE OF
WASHINGTON, STATE OF WISCONSIN,
COMMONWEALTHS OF MASSACHUSETTS
AND VIRGINIA, THE NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL
QUALITY, THE DISTRICT OF COLUMBIA,
AND THE CITY OF NEW YORK,

Plaintiffs,

v.

ANDREW R. WHEELER, AS ADMINISTRATOR
OF THE UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY; UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY; R.
D. JAMES, AS ASSISTANT SECRETARY OF
THE ARMY FOR CIVIL WORKS; AND UNITED
STATES ARMY CORPS OF ENGINEERS,

Defendants.

Case No. 3:20-cv-03005-RS

**BRIEF OF THE INSTITUTE FOR POLICY
INTEGRITY AT NEW YORK
UNIVERSITY SCHOOL OF LAW AS
AMICUS CURIAE IN SUPPORT OF
PLAINTIFFS' MOTION FOR SUMMARY
JUDGMENT**

Hearing: June 3, 2021, 1:30 p.m.
Judge: Hon. Richard Seeborg

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1 The Institute for Policy Integrity at New York University School of Law (“Policy Integrity”)
 2 submits this brief as amicus curiae in support of Plaintiffs’ motion for summary judgment to enjoin
 3 the Navigable Waters Protection Rule: Definition of “Waters of the United States,” 85 Fed. Reg.
 4 22,250 (Apr. 21, 2020) (“Rule”), promulgated by the Environmental Protection Agency and
 5 Department of the Army, Corps of Engineers (collectively, “the agencies”).¹

6 INTEREST OF AMICUS CURIAE

7 Policy Integrity is a nonpartisan think tank dedicated to improving the quality of government
 8 decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and
 9 environmental policy. Policy Integrity’s staff of economists and lawyers has produced extensive
 10 scholarship on the use of economic analysis in regulatory decisionmaking. Its director, Professor
 11 Richard L. Revesz, has published over 80 articles and books on environmental and administrative law,
 12 including numerous works on environmental federalism.²

13 Harnessing its academic and regulatory expertise, Policy Integrity has participated in multiple
 14 agency and court proceedings regarding the Rule. For instance, Policy Integrity submitted comments
 15 on the proposal underlying the rule. Policy Integrity’s economics director, Peter Howard, Ph.D., co-
 16 authored a report with Jeffrey Shrader, Ph.D., a professor at Columbia University’s School of
 17 International and Public Affairs, analyzing flaws in the economic analysis accompanying that
 18 proposal, which Policy Integrity submitted to the record. And Policy Integrity has submitted amicus
 19 briefs in support of plaintiffs challenging the Rule in five other courts. *See* Mot. of the Institute of
 20 Policy Integrity to Participate as Amicus Curiae at 3.

21 In this case, Plaintiffs contend that the agencies fail to meaningfully evaluate the Rule’s
 22 extensive impacts. Because the agencies’ economic analysis is their most focused assessment of those
 23

24
 25 ¹ This brief does not purport to represent the views, if any, of New York University School of
 26 Law. Policy Integrity states that no party’s counsel authored this brief in whole or in part, and no
 27 person contributed money intended to fund the preparation or submission of this brief.

28 ² A full list of publications can be found in Prof. Revesz’s online faculty profile,
<https://its.law.nyu.edu/facultyprofiles/index.cfm?fuseaction=profile.overview&personid=20228>.

1 impacts, Policy Integrity’s expertise in economic analysis and experience with the agencies’ various
2 rulemakings give it a unique and useful perspective on that claim.

3 Accordingly, this brief focuses on the fundamental flaws, including economic errors and
4 unfounded assumptions, in the agencies’ economic analyses accompanying the Rule, EPA & Dep’t of
5 the Army, Economic Analysis of the Navigable Waters Protection Rule: Definition of “Waters of the
6 United States” (2020) (“EA”).

7 SUMMARY OF ARGUMENT

8 Despite their obligation to “restore and maintain the chemical, physical, and biological
9 integrity of the Nation’s waters,” 33 U.S.C. § 1251(a)—and their authority to exercise jurisdiction
10 over waters with “a significant nexus to waters . . . navigable in fact,” *Rapanos v. United States*, 547
11 U.S. 715, 759 (2006) (Kennedy, J., concurring) (internal quotation marks omitted)—the agencies do
12 not meaningfully assess the impacts of the Rule on downstream water quality, repeatedly failing to
13 recognize the extensive harm the rule will cause.

14 Although the agencies have cited their economic analysis as one way that they have assessed
15 the rule’s water-quality impacts, *see infra* at 4–5, time after time in that analysis they rely on irrational
16 and ill-informed assumptions, violate regulatory guidance and precedent, and make claims about water
17 connectivity that are inconsistent with science—all with the effect of making the rule’s extensive
18 harms seem small in relation to its alleged cost savings. For example, the agencies tout the rule as net
19 beneficial for society despite failing to assess the extent of whole categories of water-quality harms
20 that it will impose. And while the agencies value some impacts of wetlands degradation under Section
21 404’s dredge/fill program, their analysis is riddled with errors that understate critical regulatory harms.
22 All told, the agencies neglect the vast majority of the wetlands-related costs from the rule—more than
23 \$1 billion annually, according to expert analysis. This is particularly egregious because, as detailed
24 below, the agencies’ cost-savings estimates for the Rule are substantially inflated from prior analyses.

25 By disregarding many impacts on the “chemical, physical, and biological integrity of the
26 Nation’s waters,” 33 U.S.C. § 1251(a), the agencies “fail[] to consider an important aspect” of the
27

Clean Water Act’s jurisdictional analysis, *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983), rendering the Rule arbitrary and capricious.

ARGUMENT

In limiting clean-water protection to its narrowest scope in decades, the agencies repeatedly obscure the Rule’s substantial harms from both a scientific and an economic perspective. As EPA’s Science Advisory Board concluded, the agencies “do[] not provide a scientific basis” for the rule or “incorporate best available science” to analyze its impacts. EPA Sci. Advisory Bd., Commentary on the Proposed Rule Defining the Scope of Waters Federally Regulated Under the Clean Water Act 1–2 (2020). And while the agencies’ economic analysis claims to assess the rule’s impacts, it too is sorely lacking. The errors in that analysis demonstrate that the agencies fail to provide a reasoned explanation that justifies the Rule.

I. The Agencies Cannot Evade Responsibility for Assessing the Rule’s Harms

As a preliminary matter, the agencies apparently hope to avoid responsibility for their error-filled economic analysis by claiming that they did not rely on it. 85 Fed. Reg. at 22,335; *see also* Defendants Br. 30. But those attempts fall flat.

The agencies prepared an economic analysis for the Rule pursuant to a longstanding executive order that requires agencies to assess regulatory costs and benefits and adopt a regulation only when the “benefits . . . justify its costs.” Exec. Order No. 12,866, § 1(b)(6), 58 Fed. Reg. 51,735 (Oct. 4, 1993). Costs in a regulatory analysis encompass “any disadvantage” from a rule, including harms “to human health or the environment.” *Michigan v. EPA*, 576 U.S. 743, 748 (2015). Thus, in an analysis for a rollback such as the rule at issue here, costs often take the form of environmental harms or forgone environmental benefits.

Pursuant to this Executive Order, agencies for decades have assessed, quantified, and monetized regulatory impacts. When promulgating the Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,054 (June 29, 2015) (“Clean Water Rule”), for instance, the agencies monetized many of the rule’s environmental benefits and determined that those benefits exceeded total compliance costs by tens or hundreds of millions of dollars per year. EPA & U.S. Dep’t

1 of the Army, Economic Analysis of the EPA-Army Clean Water Rule xi (2015) (“2015 EA”). Yet in
2 the Navigable Waters Rule, the agencies now conclude that compliance cost savings exceed monetized
3 benefits of the forgone environmental protections—this time unreasonably understating forgone
4 benefits while inflating compliance-cost savings. *See infra* Sections II–IV.

5 When substantial flaws undermine an agency’s economic analysis, like here, courts find the
6 rule arbitrary and capricious. *See, e.g., Advocates for Highway & Auto Safety v. FMCSA*, 429 F.3d
7 1136, 1146–47 (D.C. Cir. 2005). Yet the agencies here claim that the Rule “is not based on the . . .
8 economic analysis,” and cite caselaw to suggest that only if “an agency decides to rely on a cost-
9 benefit analysis” would this doctrine apply. 85 Fed. Reg. at 22,335 (citing *Nat’l Ass’n of Home*
10 *Builders v. EPA*, 682 F.3d 1032, 1039–40 (D.C. Cir. 2012)). But this claim cannot relieve the agencies
11 of responsibility for their erroneous economic analysis, for two reasons.

12 First, when changing course, an agency is required to “articulate a satisfactory explanation for
13 its action,” and courts set aside the action if an agency failed to consider “an important aspect of the
14 problem.” *State Farm*, 463 U.S. at 43. An important aspect that agencies may not ignore is the harm
15 of a deregulatory rule, *see, e.g., Air All. Houston v. EPA*, 906 F.3d 1049, 1067–68 (D.C. Cir. 2018),
16 including, like here, when the agency makes policy judgments it considers “reasonable” in interpreting
17 a purportedly “ambiguous” statute. *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2124–25
18 (2016). Here, the agencies attempt to exercise their discretion under the Clean Water Act yet hardly
19 assess the Rule’s impact on “the chemical, physical, and biological integrity of the Nation’s waters,”
20 33 U.S.C. § 1251(a). By failing to adequately assess the rule’s water-quality harms—as evidenced, in
21 part, by their faulty economic analysis—the agencies do not provide the required justification.

22 Second, the agencies’ own statements demonstrate that the Rule is in fact based in part on the
23 economic analysis. For example, in justifying the rule, the agencies tout their belief that the rule will
24 “ease administrative burdens,” 85 Fed. Reg. at 22,269, and result in “net cost savings for all entities
25 affected,” *id.* at 22,335, and that “net benefits would increase,” *id.* at 22,334. And the agencies have
26 claimed in other litigation challenging this same rulemaking that the Rule is “supported” by the
27 economic analysis and that the analysis helps “thoroughly explain[]” the agencies’ decisions by

1 showing that the rule’s benefits “far outweigh costs or foregone benefits.” Brief for Appellants 15,
 2 *Colorado v. EPA*, No. 20-1238 (10th Cir. July 9, 2020).

3 For these reasons, the agencies cannot escape the flaws in their economic analysis. And as
 4 detailed below, those flaws make clear that the Rule is arbitrary and capricious.

5 **II. The Agencies Irrationally Disregard Most of the Rule’s Harms**

6 The agencies pay little attention to the unquantified costs (in the form of forgone environmental
 7 benefits) of the Rule under the Section 311 oil spill prevention program and the Section 402 pollutant-
 8 discharge program.

9 As longstanding White House guidance explains, agencies should assess “quantitative
 10 information” about a rule’s impacts whenever possible—such as the number of “stream miles of
 11 [affected] water quality.” Office of Mgmt. & Budget, Circular A-4, Regulatory Analysis 27 (2003)
 12 (“Circular A-4”). If an agency cannot “express in monetary units all of the important benefits and
 13 costs,” then it should carefully assess how “important the non-quantified benefits or costs may be in
 14 the context of the overall analysis,” performing a detailed qualitative analysis when “the non-
 15 quantified benefits and costs are likely to be important.” *Id.* at 2. Here, however, the agencies not only
 16 fail to provide adequate quantitative estimates, but also draw conclusions about the rule that may be
 17 undermined by a fair assessment of those unquantified impacts.

18 The agencies’ contrasting approach in the Clean Water Rule helps illustrate this point. In 2015,
 19 to assess that rule’s impacts, the agencies used mathematical sampling to project that the Clean Water
 20 Rule would increase federal regulatory protection of all waters by 2.84–4.65%. 2015 EA at 12. By
 21 knowing how many waters would be affected, the agencies were able to quantify and monetize many
 22 costs and benefits. The agencies projected *all* compliance costs from the rule, and monetized
 23 regulatory benefits under the Section 402 and 404 programs. *Id.* at xi. Through this assessment, the
 24 agencies concluded that the rule’s monetized benefits—that is, environmental benefits under Sections
 25 402 and 404—exceeded total compliance costs. *Id.* at x–xi. Thus, the agencies were able to conclude
 26 that this rule was net beneficial on the whole. Though there were benefits of the Clean Water Rule that
 27

1 were unmonetized at the time, monetizing those benefits would have only served to further support
2 the agencies' conclusion that the rule was net beneficial.

3 In contrast to that sensible approach in 2015, the agencies now continually complain that "data
4 limitations" prevent quantification of the waters losing protection under the Navigable Waters Rule,
5 and as a result, the agencies provide a nationwide analysis only of the rule's impacts under Section
6 404, providing no quantification of the rule's nationwide impact outside that single program. EA at
7 xxii. This leads to a very restricted set of analyses. For example, the agencies analyze three limited
8 "case study" watersheds, but fail to monetize Section 402 water-quality impacts like they did in the
9 Clean Water Rule. *Id.* at xviii–xix tbl.ES-4. And in a qualitative assessment, the agencies briefly
10 recognize adverse impacts such as the rule's possible "negative impact on water quality," *id.* at 59,
11 and probability of an increased risk of oil spills, *id.* at 83, but do not assess the severity or downstream
12 harms of these impacts and repeatedly suggest that states may limit these impacts by filling the
13 regulatory gap. *See, e.g., id.* at 62; *see also infra* Section III.A.3 (criticizing assumption of state gap-
14 filling as unsupported).

15 Circumscribing their analysis in these ways leaves the agencies unable to make meaningful
16 estimates of the Rule's impacts, despite their obligation to reasonably assess available information
17 about a rule's effects. By failing to meaningfully assess the scope of so many of the rule's impacts,
18 the agencies do not meaningfully evaluate "how important" these rollbacks are or provide even
19 ballpark estimates of the resulting water-quality harms. *See* Circular A-4 at 2. Nor do they "evaluate
20 the[] significance" of all effects—quantified and unquantified—and assess "which non-quantified
21 effects are most important," using reasonable assumptions to analyze whether the rule is net beneficial
22 once those impacts are taken into account. *Id.*

23 In sum, the agencies cannot seriously purport to protect the nation's waters when they do not
24 meaningfully assess how severely the Rule will harm water quality. Their failure to quantify or
25 meaningfully assess so many regulatory impacts renders hollow their claims that the rule is net
26 beneficial and undermines their justification for the rule.

1 **III. The Agencies Grossly Undervalue the Harms That They Do Quantify, Failing to** 2 **Recognize the Critical Importance of Wetlands**

3 The limited and circumscribed monetization that the agencies do provide is also fatally flawed
4 as it unreasonably undervalues the Rule’s harms in multiple ways. As explained above, the agencies
5 monetize harms only under the Section 404 program. They assess these impacts at two different scales:
6 nationwide, and in three case studies. But under both approaches, the agencies arbitrarily minimize
7 the harms of wetlands degradation.

8 **A. The Nationwide Analysis Irrationally Undervalues the Harms of Wetlands** 9 **Degradation Through at Least Three Major Errors**

10 The nationwide analysis irrationally disregards most of the harms to wetlands under the Section
11 404 program and incorrectly concludes that this aspect of the rule is cost-benefit justified.

12 The nationwide analysis projects cost savings and forgone benefits from wetlands degradation
13 under four “scenarios,” which apply different assumptions about the degree to which states will
14 regulate the waters losing federal protection. EA at xxii–xxiii. Under each scenario, the agencies
15 conclude that purported cost savings under Section 404 exceed the harms. Yet the agencies’ own
16 analysis shows that the rule may cause more harm through wetlands degradation than economic
17 benefit. *See id.* at xxiii (reporting overlapping ranges of costs and benefits). When a regulatory measure
18 may be net costly, as these analyses show, longstanding White House guidance instructs the agency
19 to “conduct further analysis” to determine whether “alternative plausible assumptions [are] more
20 appropriate.” Circular A-4 at 42. Yet the agencies disregard this advice and continually short-change
21 their forgone benefit estimates.

22 Specifically, the agencies commit at least three crucial errors. First, they ignore wetlands’ well-
23 recognized interstate benefits. Second, they erroneously devalue the benefits that individuals enjoy
24 from in-state wetlands. And third, they make baseless assumptions that states will seamlessly fill the
25 regulatory gap left by the rule, despite extensive indications otherwise. And these errors are
26 significant: Correcting them reveals that the rule could deprive society of over \$1.6 billion in annual
27 benefits under the Section 404 program, according to an expert economist’s regulatory comments—
28 far beyond what the agencies project. Jeffrey Mullen, Ph.D., *Final Review of the 2018 EPA Economic*
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1 *Analysis for the Proposed Revised Definition of Waters of the United States* 32 tbl.2.2 (2019) (“Mullen
2 Report”).³ When properly analyzed, the rule’s social harms from wetlands degradation thus likely
3 exceed associated cost savings by a wide margin.

4 **1. The Agencies Ignore the Substantial Interstate Benefits Wetlands Provide**

5 One of the most substantial errors is the agencies’ decision to cut off the harms of wetlands
6 degradation at the state border. This not only leads to a drastic undercounting of the rule’s harms, but
7 also evinces a fundamental misunderstanding of wetlands services.

8 To monetize the costs of wetlands degradation, the agencies estimate the wetlands acreage lost
9 in each state from the rule and then, using studies that assess people’s willingness to pay for wetlands
10 protection, calculate the monetary value of that lost acreage. But the agencies erroneously assume that
11 only individuals residing within the state of the affected wetland are harmed, and that the harm from
12 loss of out-of-state wetlands “is zero.” EA at 207.

13 This assumption violates sound science, as wetlands benefit a wide range of other water bodies
14 without respect to state borders. EPA, *Connectivity of Streams and Wetlands to Downstream Waters:
15 A Review and Synthesis of the Scientific Evidence* 4-1 to 4-45 (2015) (“Connectivity Report”). Echoing
16 the science, economic studies submitted to the agencies during the comment period conclude that
17 individuals place considerable value on wetlands outside their own state. *See, e.g.,* Catherine L. Kling,
18 Ph.D., *Expert Review of the Economic Analysis for the Proposed Revised Definition of “Waters of the
19 United States”* 6 (2019) (“Kling Report”). One study, for example, finds that more than 80% of the
20 benefits of wetlands protection are interstate. John C. Whitehead, Ph.D., *Comments on “Economic
21 Analysis for the Proposed Revised Definition of ‘Waters of the United States’”* 10 (2019) (“Whitehead
22 Report”). The agencies’ assumption that the benefits of wetlands protection stop at the state border
23 thus represents “a complete failure to reasonably reflect upon the information contained in the record.”
24 *Sierra Club v. Dep’t of the Interior*, 899 F.3d 260, 293 (4th Cir. 2018) (internal quotation marks
25 omitted).

26
27
28 ³ Mullen’s estimates are in 2017\$, whereas the EA presents estimates in 2018\$.
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1 The agencies' justification for this approach—that much of the relevant economic literature on
 2 wetlands valuation was “conducted at the state level,” EA at 207—misses the point. The fact that some
 3 studies looked at valuation of in-state wetlands hardly means that wetlands provide zero interstate
 4 benefits. In fact, numerous relevant studies assess multi-state regions, and those studies “make clear
 5 that people are willing to pay for wetlands across regional distances.” Peter Howard & Jeffrey Shrader,
 6 An Evaluation of the Revised Definition of “Waters of the United States” (Apr. 11, 2019). One study,
 7 for instance, “found that residents of Oregon, Washington, and Nevada all reported positive
 8 willingness to pay values to protect wetlands in . . . California.” Kling Report at 6. Research also
 9 shows that households as distant as 640 miles from a water body can benefit from its preservation. *Id.*
 10 Indeed, the agencies briefly admit that “wetland benefits cross[] state boundaries,” EA at 226, yet their
 11 analysis assumes the opposite.

12 Ultimately, while there may be “a range of values” for wetlands' interstate benefits, the value
 13 is “certainly not zero” as the agencies assume. *Ctr. for Biological Diversity v. Nat'l Highway Traffic*
 14 *Safety Admin*, 538 F.3d 1172, 1200 (9th Cir. 2008).

15 **2. The Agencies Grossly Underestimate Wetlands' In-State Benefits**

16 Because the agencies irrationally disregard wetlands' interstate benefits, they consider only the
 17 harms to in-state residents. But here, too, they severely undervalue the rule's harms.

18 To monetize in-state harms, the agencies commissioned a study that calculated a per-acre value
 19 for wetlands loss per household. *See* Klaus Moeltner et al., *Waters of the United States: Upgrading*
 20 *Wetland Valuation Via Benefit Transfer*, 164 Ecological Econ. 1 (2019) (“Moeltner Study”), *cited in*
 21 EA at 207–10. The agencies then apply that value to monetize the harm of degraded wetlands in each
 22 state to that state's residents. In calculating those state-level values, the agencies commit several errors.

23 First, the agencies ignore the unique benefits that wetlands provide to local residents, such as
 24 attenuating flooding, Connectivity Report at 4-1 to 4-2 (describing benefits), by irrationally assuming
 25 that *no* in-state residents live near any degraded wetland. EPA & Army Corps of Engineers, The
 26 Navigable Waters Protection Rule – Public Comment Summary Document, Topic 11: Economic
 27 Analysis and Resource and Programmatic Assessment 80 (2020) (“Response to Comments”). The

1 agencies’ explanation for this exclusion—that “the majority [of] the affected households are likely to
 2 be non-local,” *id.*—is insufficient. Even if many individuals do not live near a degraded wetland, the
 3 agencies’ own analysis shows that whether someone lives locally to a wetland is a major variable in
 4 their valuation, EA at 209, and the additional valuation from those who do live near a wetland could
 5 thus still be substantial.

6 The agencies also reduce the benefits of wetlands for in-state residents through a mathematical
 7 trick. The commissioned study found that individuals place a greater value on each acre of wetlands
 8 as the total acreage of wetlands increases. *See* Moeltner Study at 9 (reporting “convexity of the
 9 [willingness-to-pay] function”). Accordingly, individuals suffer more when wetlands are degraded in
 10 areas with greater wetlands acreage versus less acreage. Thus, the “baseline” acreage used in the
 11 analysis—that is, the assumed acreage starting point, prior to any degradation—significantly affects
 12 the assessment of forgone benefits. Yet in calculating the harms from wetlands losses, the agencies
 13 assume an unreasonably low baseline acreage of just 10,000 per state, EA at 210, even though most
 14 states have well beyond 10,000 acres of wetlands. California alone, for instance, has roughly 2.9
 15 million wetlands acres.⁴ According to one expert, setting the low baseline acreage obscures more than
 16 \$1.2 billion in annual harms caused by the Rule. *See* Mullen Report at 32.

17 By arbitrarily reducing the harms that in-state residents suffer from wetlands loss, the agencies
 18 “opportunistically frame[] the costs . . . of the rule.” *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1148–
 19 49 (D.C. Cir. 2011).

20 **3. The Agencies’ Assumption that States Will Preserve Waters Losing 21 Federal Protection Is Speculative and Overlooks Key Considerations**

22 The agencies also inappropriately minimize the reported harms of the rule under Section 404
 23 through unsupported assumptions about state gap-filling. To support their claim that the benefits of
 24 the rule outweigh its costs, the agencies rely on the speculative assumption that states may preserve
 25

26
 27 ⁴ State of California, *What Is The Extent of California’s Wetlands?*,
 28 https://mywaterquality.ca.gov/eco_health/wetlands/extent/index.html.

1 many of the waters losing federal protection. *See, e.g.*, EA at xxiii (showing that cost savings outweigh
 2 forgone benefits by greater ratio as states are assumed to fill the gap).

3 But agencies are not permitted to rely on “speculation . . . not supported by the record,” *Ariz.*
 4 *Cattle Growers’ Ass’n v. U.S. Fish & Wildlife*, 273 F.3d 1229, 1244 (9th Cir. 2001)—an important
 5 principle enshrined in EPA’s own guidelines. Specifically, EPA guidelines provide that a cost-benefit
 6 analysis may account for rules that are “currently under consideration,” but should not speculate about
 7 future rulemakings that are neither “imminent” nor can be “anticipated with a high degree of
 8 certainty.” EPA, *Guidelines for Preparing Economic Analyses* 5-2, 5-13 (2010).

9 And here, the agencies ignore concrete evidence showing that states will likely not fill the
 10 regulatory gap. That evidence falls into three categories. First, states have little incentive to prohibit
 11 pollution across state lines. *See EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 495 (2014)
 12 (explaining that since “pollution emitted in one State . . . caus[es] harm in other States,” states will
 13 typically underregulate pollution when “[l]eft unregulated”). Indeed, a key purpose of the Clean Water
 14 Act is to “protect[] downstream States from out-of-state pollution that they cannot themselves
 15 regulate,” *Rapanos*, 547 U.S. at 777 (Kennedy, J., concurring), and that upstream states are
 16 incentivized to under-regulate. The agencies assume away this reality.

17 Second, state-by-state regulation can be very costly, and many states may lack the resources
 18 to effectively protect their own waters. For instance, Michigan—one of only two states to administer
 19 its own Section 404 program—generates permit fees covering less than 20% of the program’s cost.
 20 Attorneys General of New York et al., Comment Letter to Revised Definition of “Waters of the United
 21 States” A-12 (Apr. 15, 2019). As fifteen states advised the agencies, regulating would require states
 22 to “commit a substantial amount of state money” or “impose extremely high permit application fees,”
 23 either of which “would impose a substantial burden.” *Id.*

24 Third, numerous states have staunchly opposed additional clean-water protections in the recent
 25 past. Indeed, thirty-two states sued to enjoin the Clean Water Rule in 2015, 85 Fed. Reg. at 22,258
 26 n.15, arguing that the rule’s modest expansion of federal jurisdiction would “burden the States with
 27 substantial unrecoverable costs.” *See States’ Memorandum in Support of Motion for Preliminary*

Injunction 10, *North Dakota v. EPA*, 127 F. Supp. 3d 1047 (D.N.D. 2015). Yet despite this demonstrated antipathy to sensible clean-water controls, the agencies now implausibly assume that fifteen of those same states may fill the regulatory gap left by the Rule. *Compare* 85 Fed. Reg. at 22,258 n.15 with EA at 39–41.

In short, the agencies’ claim that states may preserve the waters losing protection omits key considerations and thus inappropriately minimizes regulatory harms.

B. The Agencies’ Case Study Estimates Are Fundamentally Flawed

The agencies also evaluate the costs and benefits of wetlands degradation through “case studies” of three watersheds, but these case studies suffer from similar errors as the nationwide analysis,⁵ and again arbitrarily minimize the costs of wetlands degradation.

The case studies also have their own unique errors. To monetize wetlands degradation in the case studies, the agencies rely on a single economic paper, written by Dr. John C. Whitehead and Dr. Glenn C. Blomquist. EA at 121. Yet as one of that study’s authors—Dr. Whitehead—advised the agencies in his comments, the agencies misapply the study to devalue wetlands services. For instance, Dr. Whitehead explained, the agencies “biase[d] . . . benefits downward” by using the median valuation reported in the study, even though the mean valuation supplies the “appropriate measure.” Whitehead Report at 14. Because the mean wetlands benefit identified by the Blomquist & Whitehead study is “at least[] 3.25 times larger than” the study’s median estimates, the agencies’ disregard for this valuation—against Dr. Whitehead’s sound advice—results in a drastic underestimate of wetlands benefits. Whitehead Report at 13–14.

The agencies also apply an inappropriately narrow timeframe, falsely assuming that individuals suffer the harms of wetlands degradation only in the year in which the degradation occurs. EA at 121 (reporting that agencies derive “annual forgone benefits” by using lumpsum values from the Blomquist & Whitehead study, without accounting for timing difference). This is mistaken. As

⁵ Similar to the nationwide analysis, the case studies rely on inappropriate assumptions about state gap-filling, *see, e.g.*, EA at xx–xxi, and falsely assume that only residents in-state and in certain neighboring counties are harmed by wetlands degradation, *id.* at 121.

Blomquist & Whitehead reported, individuals suffer from wetlands degradation not just in the year when the wetlands are lost, but also “each year” thereafter. Glenn C. Blomquist & John C. Whitehead, *Resource Quality Information and Validity of Willingness to Pay in Contingent Valuation*, 20 Res. & Energy Econ. 179, 186 n.4 (1998). This makes sense, since the downstream benefits that wetlands provide do not stop when the calendar turns. By irrationally assuming that harm from wetlands loss is limited to a single year, the agencies grossly devalue the reported cost of their case studies even further.

Ultimately, the case studies—like the national analysis—betray basic misconceptions about the benefits of wetlands services and fail to reasonably capture the rule’s harms.

IV. In Stark Contrast to Their Treatment of Forgone Benefits, the Agencies Overestimate the Rule’s Compliance Cost Savings

While drastically undercounting the forgone benefits of the Rule, the agencies take the opposite approach to cost savings, inflating these savings by quintupling their per-acre mitigation-cost estimates from the Clean Water Rule without explanation.

In 2015, when assessing the Clean Water Rule’s impacts, the agencies used available data to catalogue mitigation costs, projecting mitigation costs to comply with the rule at \$24–\$66 thousand per affected acre. *See* 2015 EA at xi (reporting total compliance cost), 40–41 (reporting total acreage affected). But here, the agencies greatly increase this valuation without explanation. Specifically, the agencies now report per-acre mitigation-cost estimates for the national analysis of \$146–\$327 thousand. *See* EA at 174–75. In other words, the Navigable Waters Rule’s high-end per-acre cost-savings estimate is nearly five times the Clean Water Rule’s estimate. With this increase in compliance costs, the agencies falsely report the rule overall as net beneficial—even without correcting for their other methodological errors.

Yet the agencies offer little explanation or justification for this change, stating simply that they “updated mitigation costs per acre and linear foot for each state.” Response to Comments at 94. This bare-bones account falls well short of the “reasoned explanation” necessary to “disregard[] facts and circumstances that underlay” the Clean Water Rule. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515–16 (2009). Because the agencies “failed to identify or explain any changed circumstances, technology, or economic conditions that would justify this dramatic recalculation” of compliance

costs, their “new and inflated calculations” lack a reasonable basis. *California v. Bernhardt*, 472 F. Supp. 3d 573, 617 (N.D. Cal. 2020).

Since agencies “cannot put a thumb on the scale by undervaluing the benefits and overvaluing the costs of more stringent standards,” *Ctr. for Biological Diversity*, 538 F.3d at 1198, this lopsided analysis cannot stand.

CONCLUSION

For the forgoing reasons, this Court should grant Plaintiffs’ motion for summary judgment.

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Respectfully submitted,

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